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# AZ K-12 Education Needs in Rural and Remote Arizona: Analysis of Responses Reviewed by Board of Directors, May 31, 2013

## Goal

- Identify needs of K-12 Education in Arizona's rural and remote counties
  - Focus on: what is needed to increase academic achievement & implement Common Core
  - Online Survey conducted in April 2013. Special thanks for AZ Department of Education for launching the survey.

## Participants

- All Public School Teachers, Principals, Superintendents in Arizona's 13 rural counties
  - 9890 surveys received. 3032 surveys were completed (31% response rate); 2813 were teachers, 149 principals, 50 superintendents, 20 other
- Highest response rates: Navajo (38%) Apache (36%) Counties
  - Lowest response rates: Coconino (19%) and Santa Cruz (19%)
  - 475(86%) of schools participated
  - 80% of respondents were female
  - More than ½ of respondents had taught for 10+ years

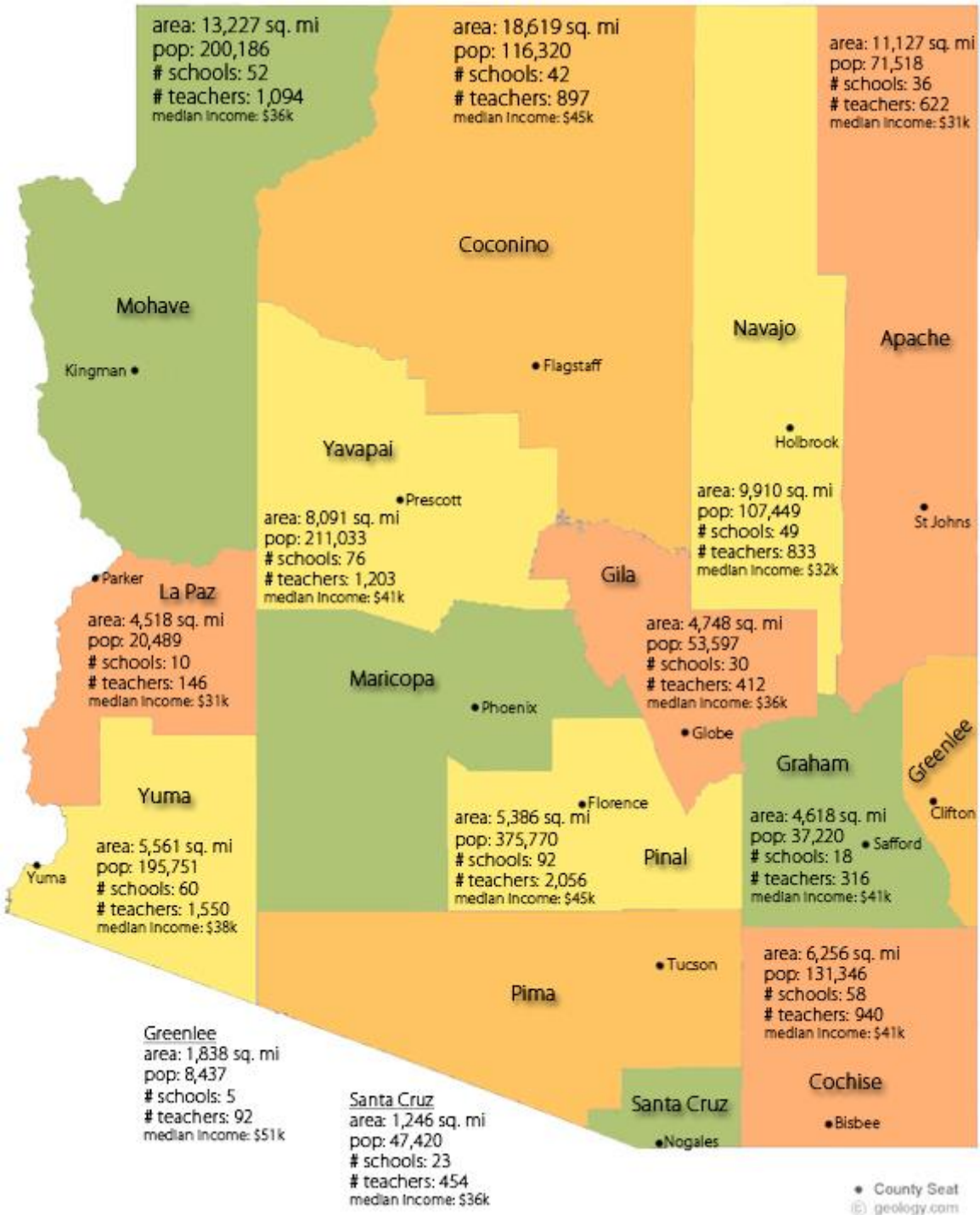
For those not familiar with rural Arizona, this map will provide basic information on those counties.

For comparison, below are the same data for Maricopa and Pima Counties:

**Maricopa:**  
area: 9,226 sq. mi.  
pop: 3.8 million  
# schools: 947  
# teachers: 29,711  
median income: \$51k

**Pima:**  
area: 9,240 sq. mi.  
pop: 980,263  
# schools: 287  
# teachers: 7,065  
median income: \$44k

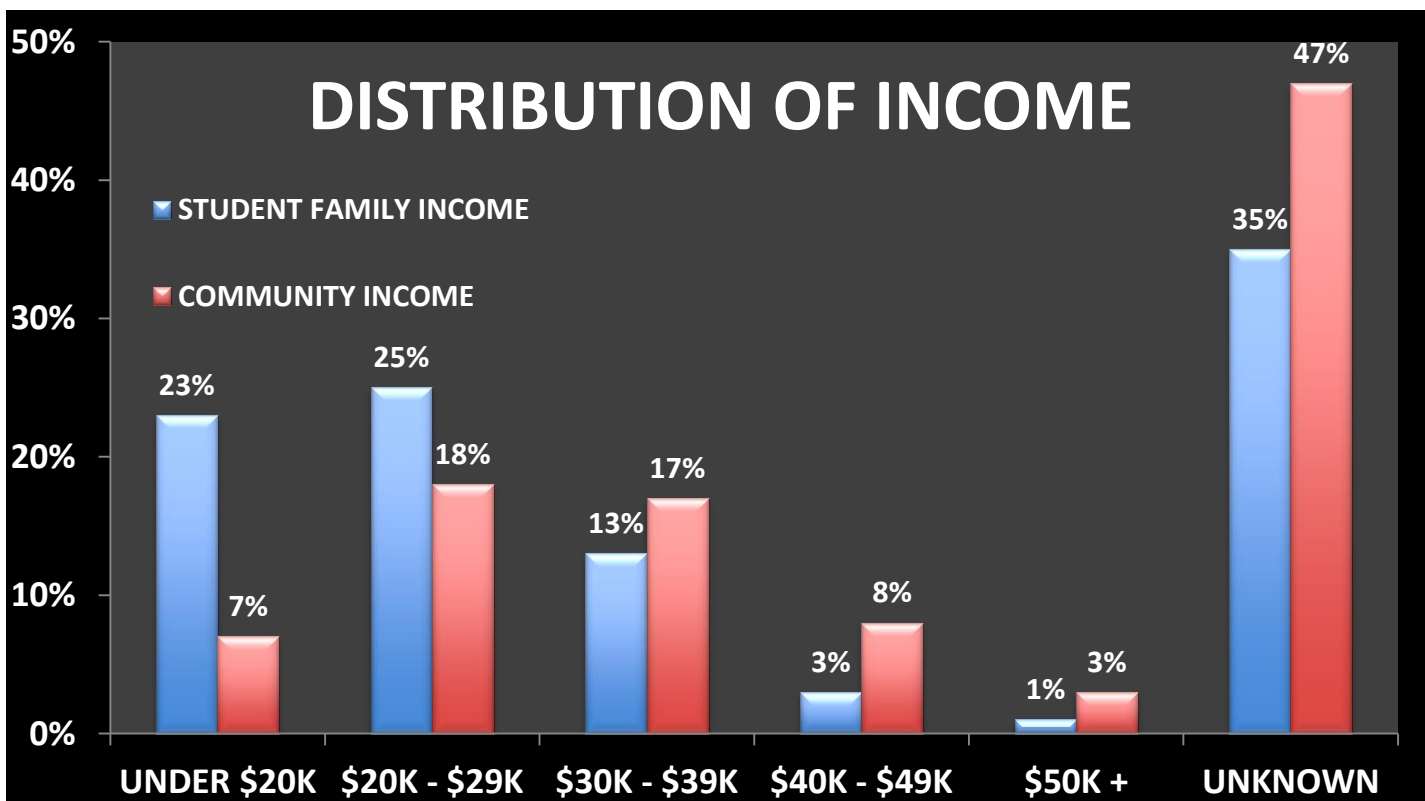
Special thanks to the Arizona Department of Education and the Arizona Association of Counties for their assistance with this information



# STUDENT FAMILY DEMOGRAPHICS

Educators were asked to estimate the student family income and community income in their area.

- ✓ Nearly ½ of educators reported student family income of less than \$30k per year (23% + 25%, charted below)
- ✓ One quarter (7% + 18%, charted below) of educators reported their community income of less than \$30k.



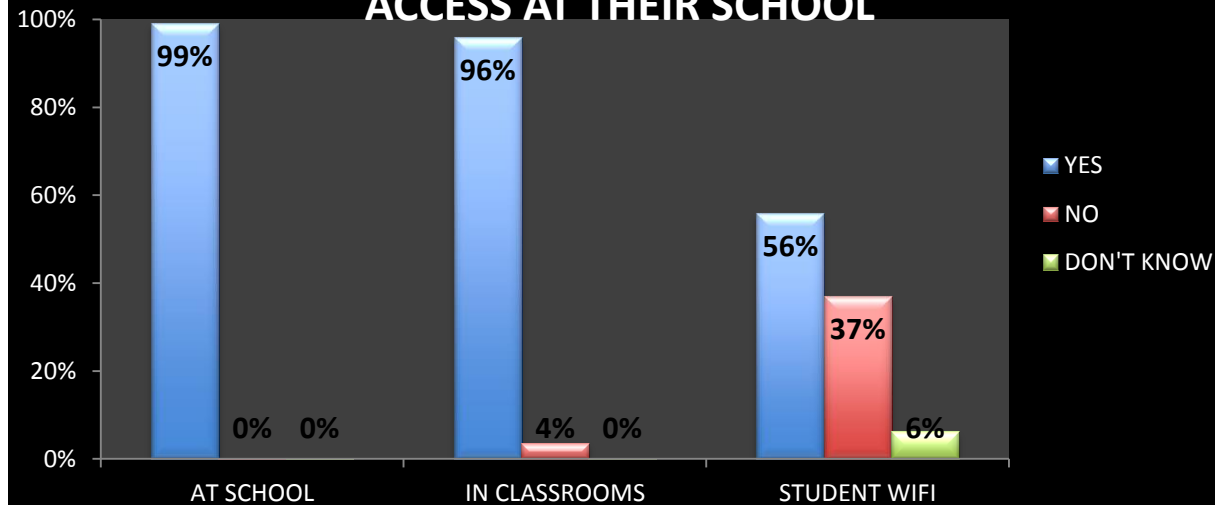
County	% educators reporting student family income less than \$30k
Apache	62%
Coconino	38%
Cochise	54%
Gila	54%
Graham	34%
Greenlee	40%
La Paz	76%
Mohave	49%
Navajo	58%
Santa Cruz	60%
Pinal	42%
Yavapai	40%
Yuma	47%

# AVAILABILITY OF INTERNET

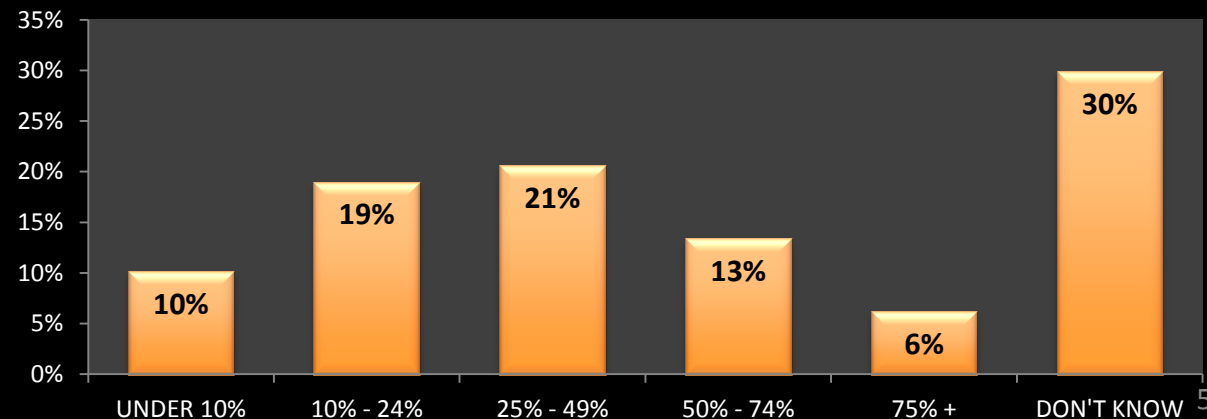
Educators were asked to tell us about the availability of internet in their school and in their student's homes:

- ✓ 99% have internet access at their school
- ✓ 96% have internet in their classroom
- ✓ 56% reported their students have access to wireless internet at their school
- ✓ 50% estimated that less than ½ of their students have the internet at home (10% +19% +21%)

## PERCENT OF EDUCATORS REPORTING INTERNET ACCESS AT THEIR SCHOOL



## EDUCATOR REPORTS OF STUDENT HOME INTERNET



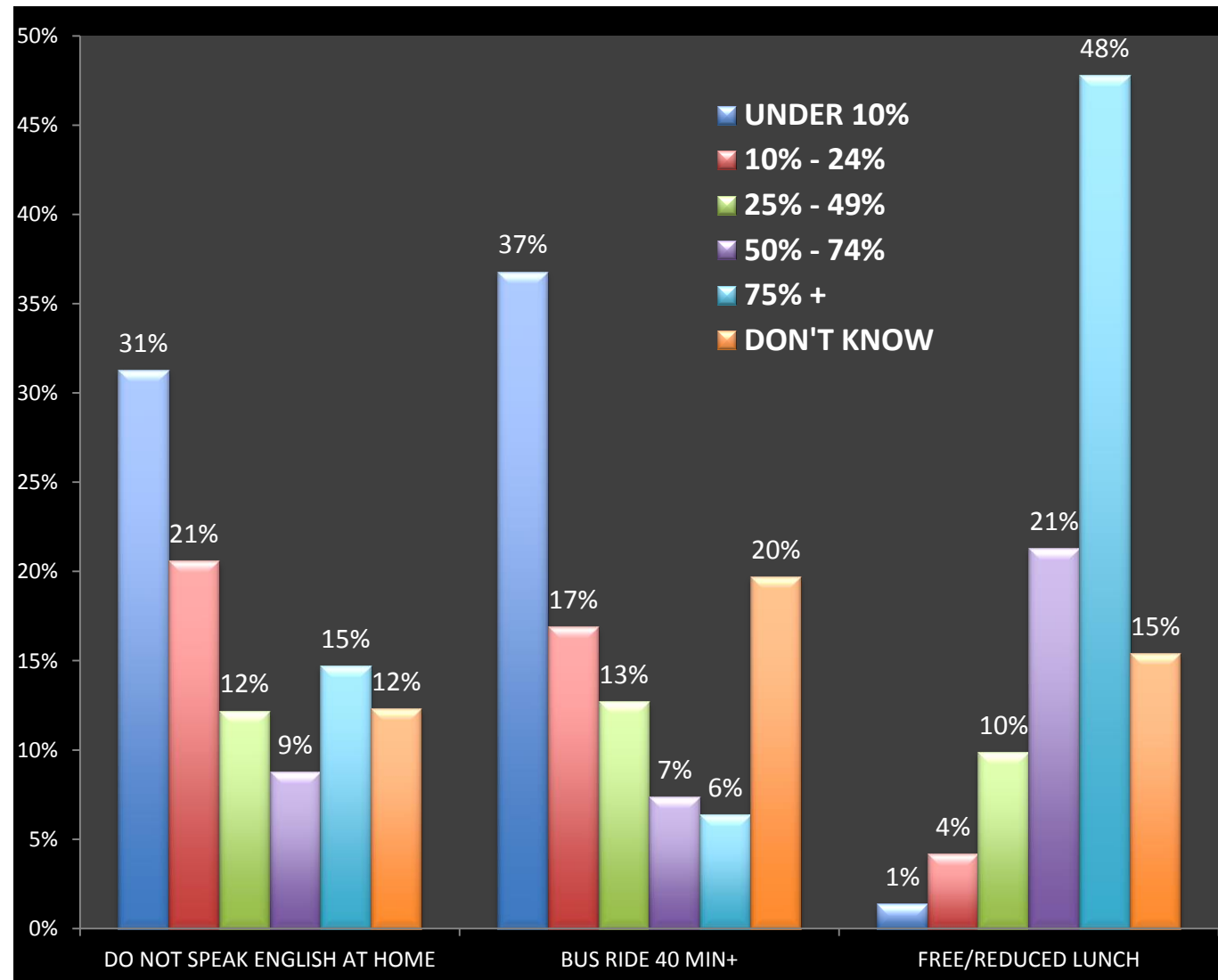
# STUDENT CHALLENGES

Educators were asked to share some of the daily challenges of their students:

✓ 24% reported that ½ of their students do not Speak English as a first Language (15% + 9%)

✓ 13% reported that over ½ of their students ride the bus 40+ minutes to school

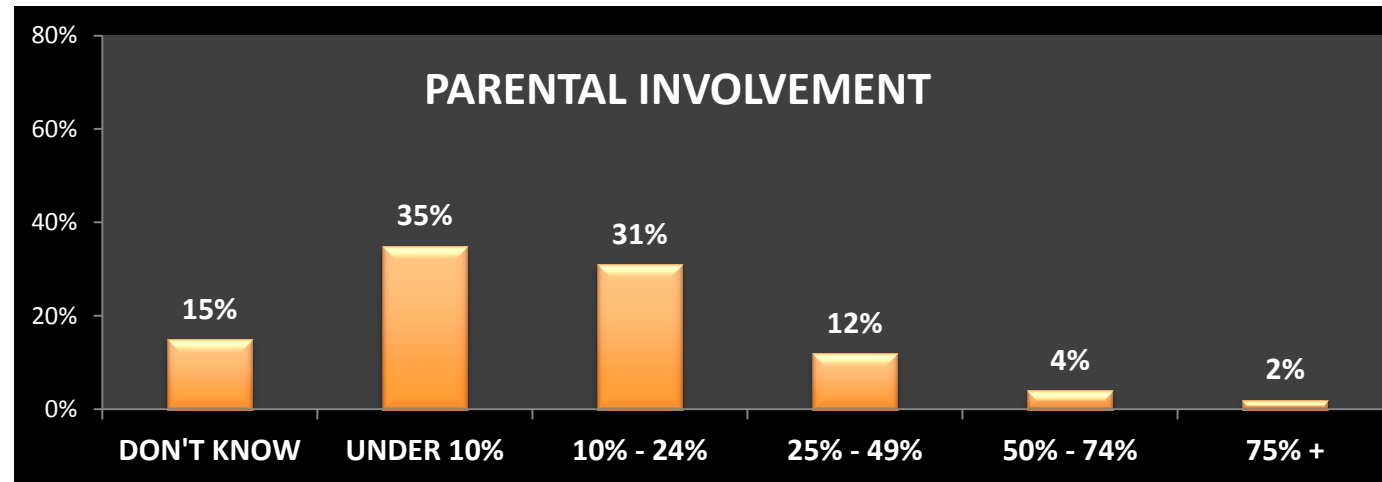
✓ Nearly ½ of educators reported that 75% of their students qualify for free breakfast and/or lunch



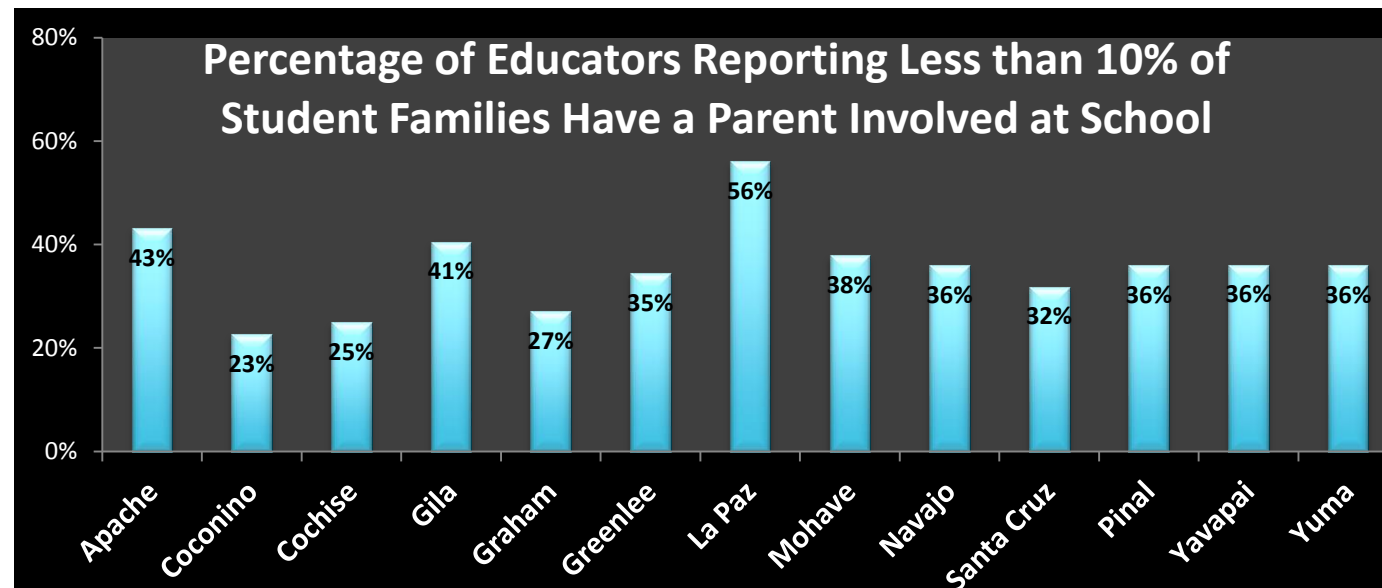
# PARENTAL INVOLVEMENT WITH SCHOOL ACTIVITIES

Educators were asked how many students had a parent involved with school activities:

✓ More than 1/3 of educators reported that less than 10% of their students had an involved parent



✓ Highest rates of lack of parental involvement are in La Paz, Apache, and Gila counties with 40%+ of educators reporting less than 10% of students have an involved parent

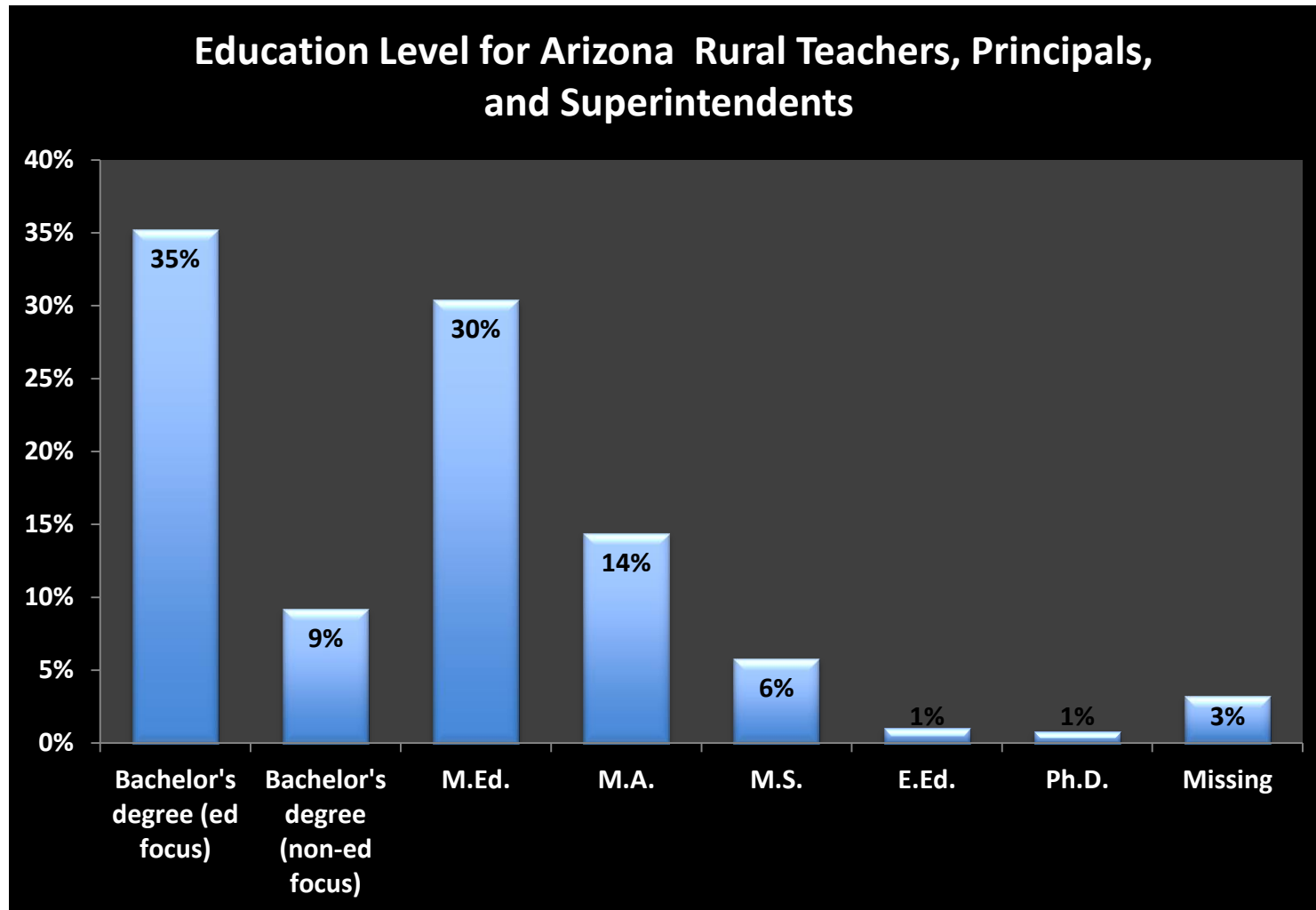


# TEACHER EDUCATION

Educators were asked about their personal education:

✓ 52% reported to hold a graduate level degree  
(30% + 14% + 6% + 1% + 1%)

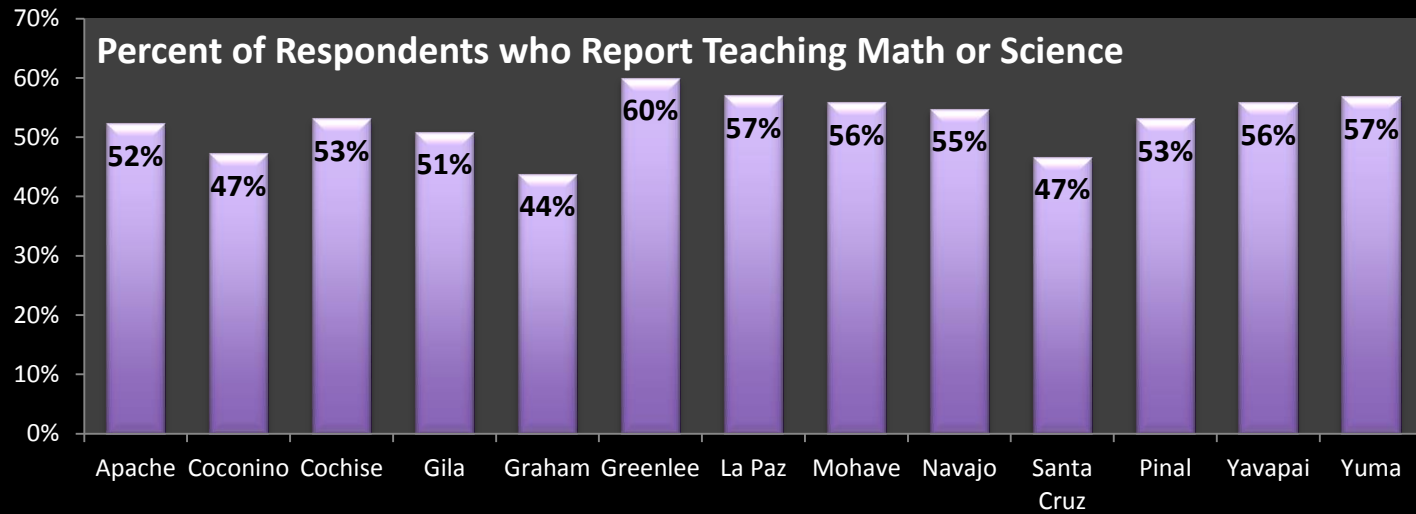
✓ 66% reported to hold a degree in education  
(35% + 30% + 1%)



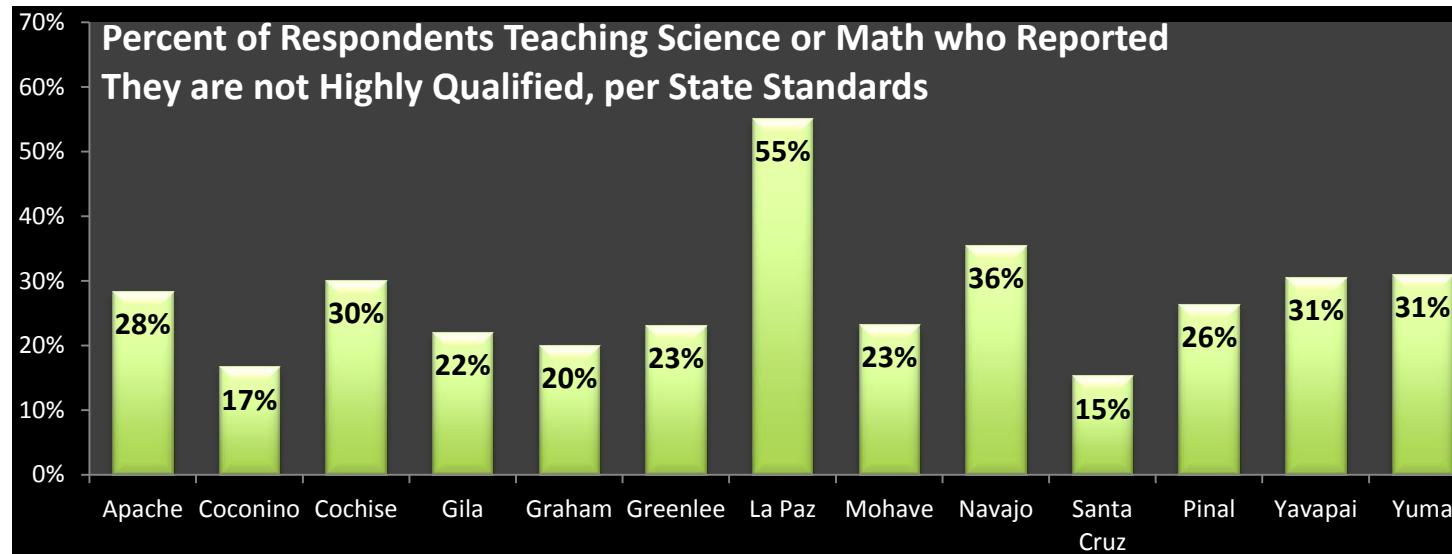


# TEACHING MATH AND SCIENCE

✓ 44% - 60%  
of our survey  
respondents teach  
Math or Science.



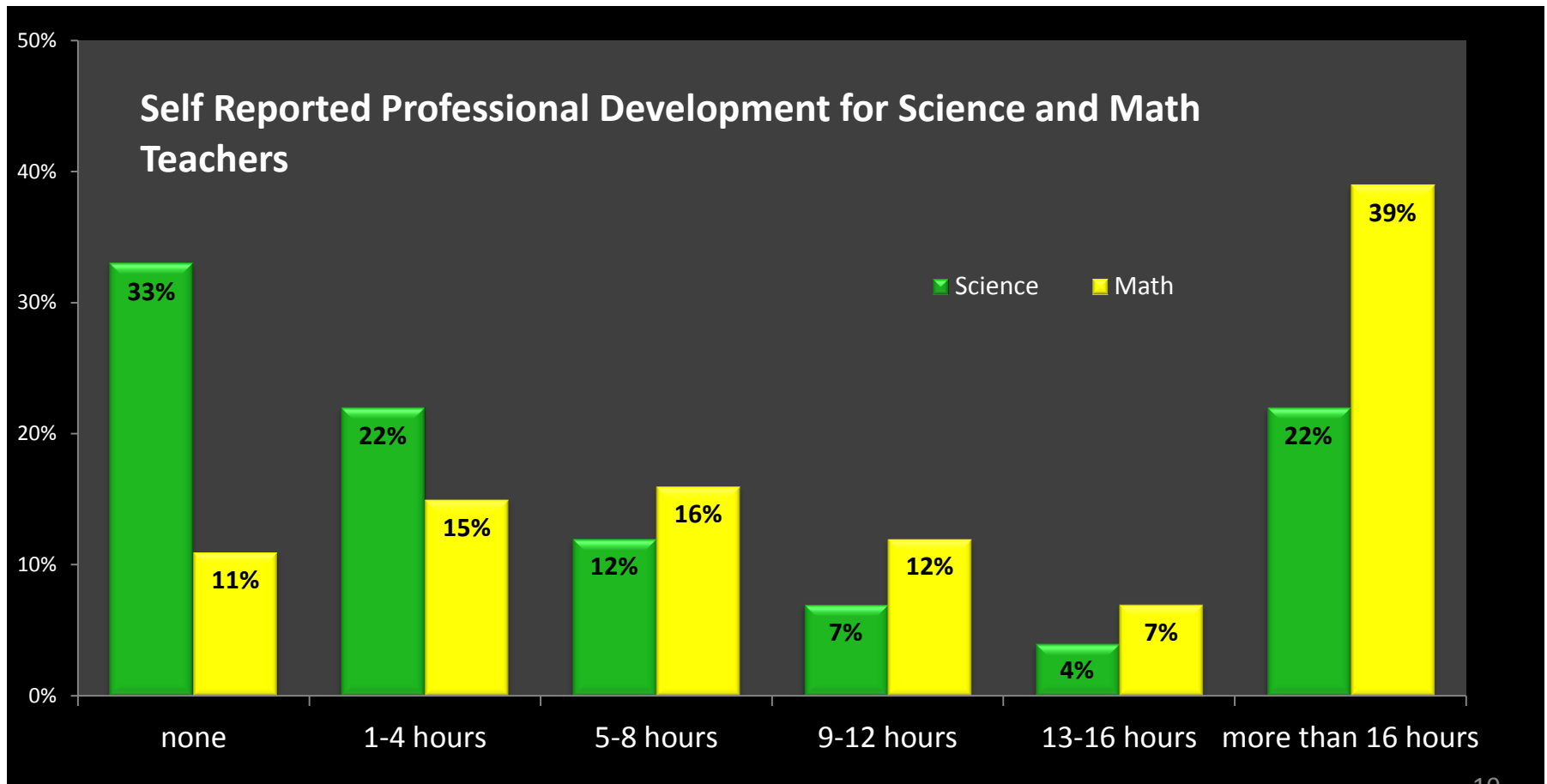
✓ There is a large  
discrepancy by county  
in % of teachers  
reporting they do not  
meet state standards to  
be a Highly Qualified  
Science or Math teacher,  
ranging from 15% in  
Santa Cruz to 55% in  
La Paz. We drill down  
into this on the next slide.



# MATH AND SCIENCE PROFESSIONAL DEVELOPMENT (PD) HOURS

- ✓ 388 science teachers report no science PD in last 3 years (33%).  
Highest concentration proportionately in Navajo and Apache Counties

- ✓ 136 math teachers report no math PD in last 3 years (11%).  
Highest concentration proportionately in Pinal and Yavapai Counties

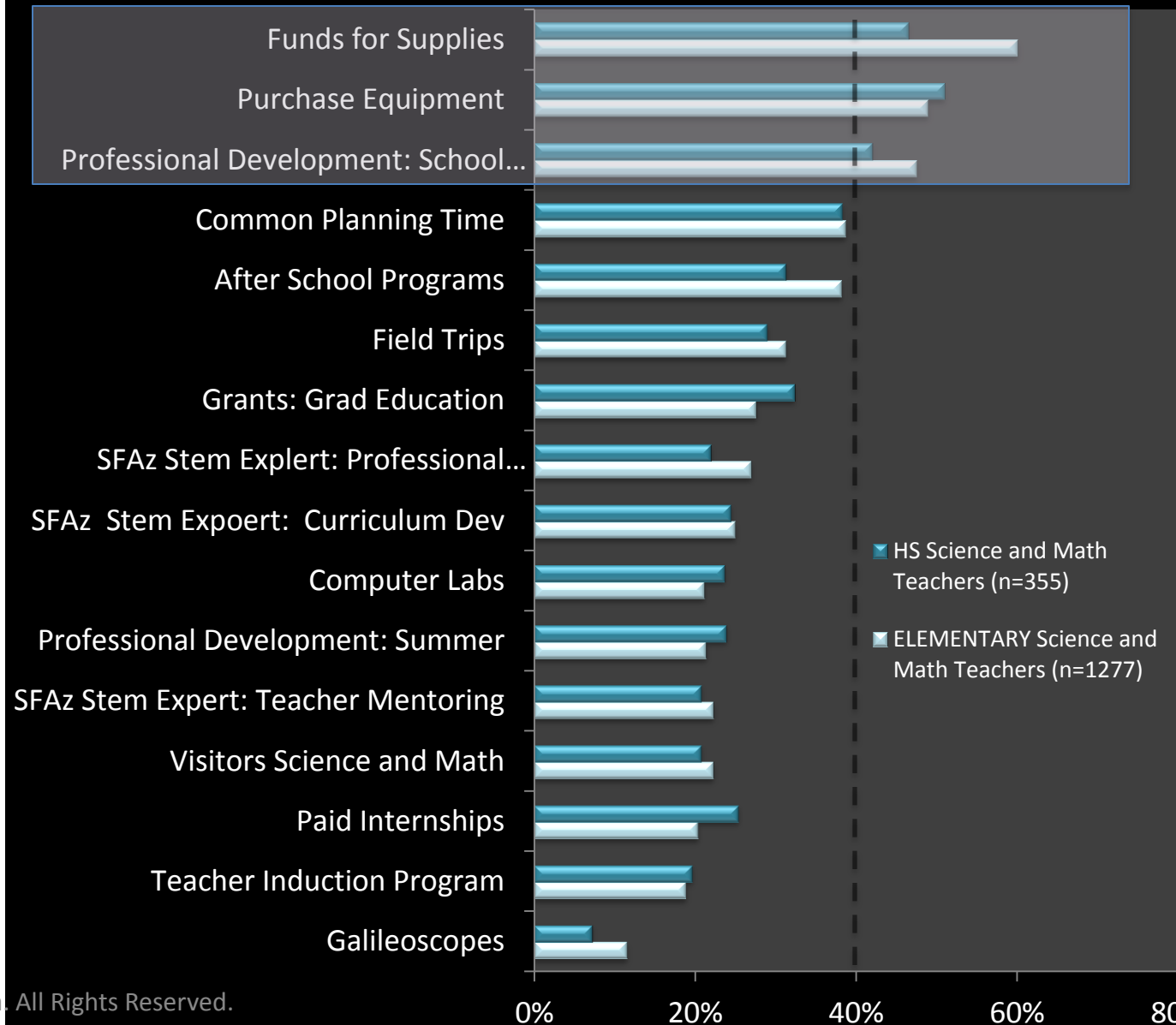


# PRIORITY SELECTIONS FOR SCIENCE AND MATH TEACHERS

We asked which 3 of the following would be most helpful in implementing Common Core.

Top priorities with 40%+ for HS and Elementary teachers were:

- 1) funds for supplies
- 2) purchase of equipment
- 3) professional development



# OPEN QUESTION: LEARNING IN SCIENCE AND MATH

Participants were asked what 1 item would help provide greater student learning in Science and Math

✓ 78% of our survey respondents wrote replies to this question. This is a very high response rate for a non-required question. This was the 20<sup>th</sup> question on the survey.

Note: Participant comments may include multiple categories and percentages do not total 100%.

Comment Category	Count	% of comments on this topic
Equipment & supplies	1334	56%
Professional development (on site preferred)	370	16%
Help with understanding and implementing common core	315	13%
Curriculum guide, access to programs, educational memberships	293	12%
Planning time-common planning time, help with integration of subject; Collaboration among educators-rearranging day to allow for time to teach STEM	147	6%
Money for teacher education	61	3%
More teachers, aides, smaller class size	57	2%
Culture where education is important to students and parents	45	2%
Mentors, guest speakers	41	2%
After school programs and field trips	23	1%
Coordination with special groups: SPED GIFTED Poverty	16	1%
Teacher pay	8	0%

# FINAL QUESTION: Is there anything else we should know before we begin this initiative?



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- ✓ 27% (827) of our survey respondents wrote replies to this question
- ✓ A sampling of these responses are available on our website [www.SFAz.org](http://www.SFAz.org)

## NEXT STEPS

- ✓ SFAz will commit \$15M to a 3-year Rural and Remote Initiative to provide teachers the tools they need to improve academic achievement and develop the necessary skills to implement Arizona's Common Core Standards and Next Generation Science Standards. We will begin with a focus on Navajo and Apache Counties as areas of greatest need, but will include programs available to all 13 counties.

# SFAZ SHORT TERM STOPGAP ACTIONS

1. Hire a full-time field staff person to assist teachers in teaching science and math in Apache and Navajo Counties. (SFAz already has STEM field staff working in other areas.)
2. Give every full-time K-12 teacher in Navajo and Apache Counties a gift card for supplies for 2013-2014 PROVIDED the school superintendent and principal agree to set aside weekly common planning time to focus on science and math and the implementation of Arizona's Common Core Standards.
3. Issue a very simple Request for Proposal (RFP) to schools in the 13 counties for up to \$10K each for equipment that would improve academic achievement in science and math. While Navajo and Apache Counties will be given priority, all responses will be considered with the requirement noted above for common planning time.
4. Issue RFP's to fund both teacher professional development and create after-school science, math and robotics clubs. Funding will be available to all counties. Staff development and planning sessions will be recorded and evaluated.

# THE CALL TO ACTION

Please join us by selecting one of the above-noted areas to support, allowing us to address educator needs more quickly. This report is a summary of the data collected. We can run cross-tabulated data any way that would be helpful to a potential donor or advisor.

Resources need to be dedicated to these 13 counties quickly, in addition to continuing support for the urban counties. We are asking individual philanthropists, trusts, foundations, and corporations to join us in investing to ensure an educated workforce that maintains America's competitiveness.

## PLEASE NOTE

It is important to note that SFAz is not making a statement on the funding needed per student. We are simply taking short-term stopgap measures to address today's needs as identified by the teachers responding to our survey. We hope the appropriate bodies review the distribution of education funding that goes to administration, versus the amount that gets to the classroom, and recommends any necessary adjustments to ensure teachers have the tools necessary to educate Arizona's Children.



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